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Conference Abstract

Clavis: An open and versatile identification key format

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Abstract

The skills and knowledge needed to recognize and classify taxa are becoming increasingly scarce, as research and management face a “taxonomic impediment”, where taxonomic knowledge is gradually disappearing from the scientific community (Engel et al. 2021). At the same time, it is clear that these skills are strongly needed in biodiversity monitoring for management and conservation, especially when carried out by citizen scientists. Formalizing the required knowledge in the form of digital identification keys is one way of making such knowledge more available for professional and amateur observers of biodiversity. Having a fully open and well-defined, platform-independent format is essential in ensuring that identification keys and the tools needed to display and create them remain both interoperable, interpretable across platforms, and freely available to all. A number of digital identification key formats exist (Dallwitz 1980, Identic Pty Ltd. 2022), but these are limited in what they can represent, their ease of use, openness, etc. A well-defined, open format addressing this alleviates the technical burden in capturing taxonomic knowledge for future use. With this poster, we present Clavis, a modern data format schema for capturing knowledge required for taxon identification through digital keys, allowing for a level of detail beyond that of any current key format (Koch et al. 2022). Clavis is fully open and supports multilingualism, geographical information, extended documentation and metadata, external services, non-binary characteristics, and more.

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Keywords

digital identification keys, citizen science, data format, taxonomy

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